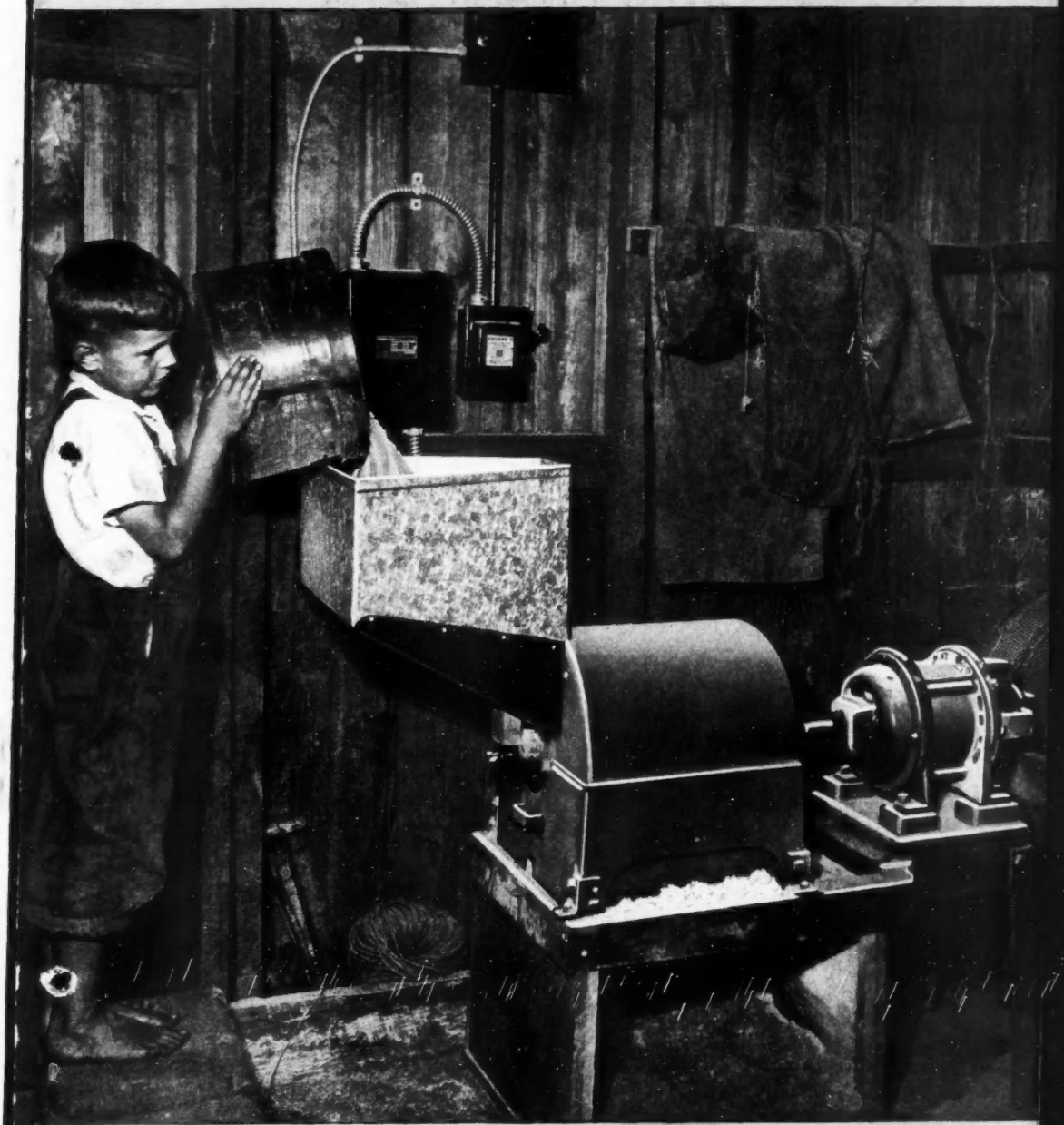
Electricity on the Farm

A MONTHLY MAGAZINE FOR THE UP-TO-DATE RURAL FAMILY



WIN A PRIZE. 10 cash awards will be given for the best titles for the above picture. *(See inside back cover for details.)*

OCTOBER
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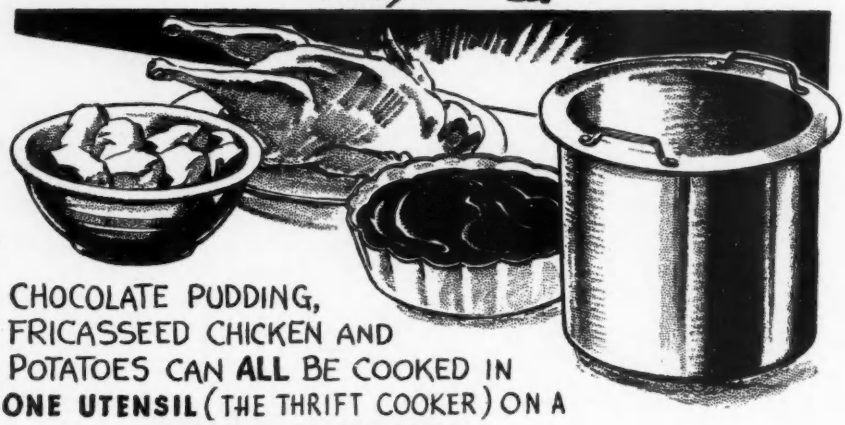
Ripley



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FRICASSEED CHICKEN AND
POTATOES CAN **ALL** BE COOKED IN
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WITHOUT THE INTERMINGLING OF FLAVORS OR ODORS!

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ELECTRIC Hotpoint RANGE

Edison General Electric Appliance Co., Inc., 5610 W. Taylor Street, Chicago

October, 1933
Vol. 6 No. 10

Electricity on the Farm

IN THIS ISSUE

Artificial Sunlight for Poultry

BY J. E. DOUGHERTY

Direct sunlight which is rich in vitamin "D" is not always available when the poultry flock need it most. But with the development of the ultra violet ray lamp a substitute for sunlight was found. The author on page 4 outlines methods of using the ultra violet lamps in preventing disease and keeping the poultry flock healthy.

The Smith's Hired Man

BY ETHEL MORRISON-MARSDEN

The possibilities of using electricity as a hired man cannot be realized unless an introductory step is taken in that direction. On page 6 the author tells of the many tasks being accomplished on the Smith farm since electricity has been employed as the hired man.

A Simple Hook-up for Dimming Poultry House Lights

BY NEAL D. HERRICK

Mr. Karain, a farmer of Hopkinson, Mass., employs what is considered an unusual dimming circuit in his poultry house. Mr. Herrick on page 8 explains the layout of the circuit as well as shows a connection diagram of same.

This Farmer Grinds His Own Feed

BY G. E. GUSTAFSON

Tests have proven to Lyle Meredith, a farmer near Maple Park, Ill., that it pays to grind feed electrically. His story is told on page 10.

Regular Monthly Features

Electrical Housekeeping, page 11; On the Air, page 13; Under the Chestnut Tree, page 14; Questions and Answers, page 15, What's New, page 17.

EDITORIAL

THE experience of some of the midwestern states this year shows that destructive droughts are possible in any section of the country.

Just when grain prices are sufficiently high to give a little profit, many farmers find themselves faced with the smallest income in years due to diminished harvest.

In the Pacific Coast region where rainfall is light during summer months, good crops are assured through the general use of irrigation employing water from wells. Pumping for irrigation is common practice in that section of the country and that it is profitable is indicated by its almost universal employment on the Pacific slope.

Provision for irrigation in many sections of the country considered heretofore as having satisfactory annual rainfall may be expected in the future. With the advent of electric power on farms, pumping for irrigation is a practice which entails a minimum of addtional work and is one which is thoroughly dependable. The closing of a switch sets the pumps in motion once the installation has been completed, and a supply of water to keep the crops alive during a dry period is assured.

As long as farmers must depend entirely upon natural rainfall to bring crops to maturity, there will always be a factor of uncertainty. In many instances power irrigation is the best insurance a farmer can buy against crop failure.

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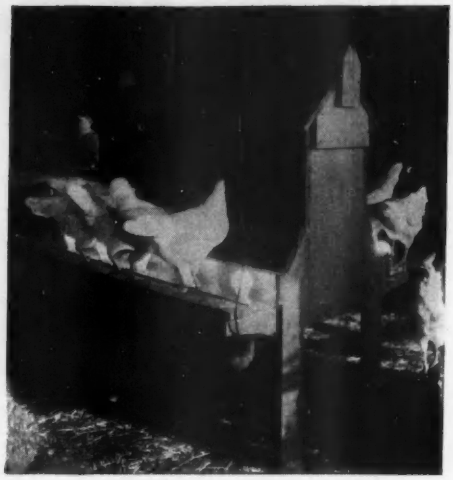
ARTIFICIAL SUNLIGHT for POULTRY

By J. E. DOUGHERTY



CX-60 watt Mazda lamps installed along the platform of the dry mash hopper for the purpose of irradiating the legs of the chickens while they eat. The beneficial effects of ultra-violet light are largely absorbed through the legs and head.

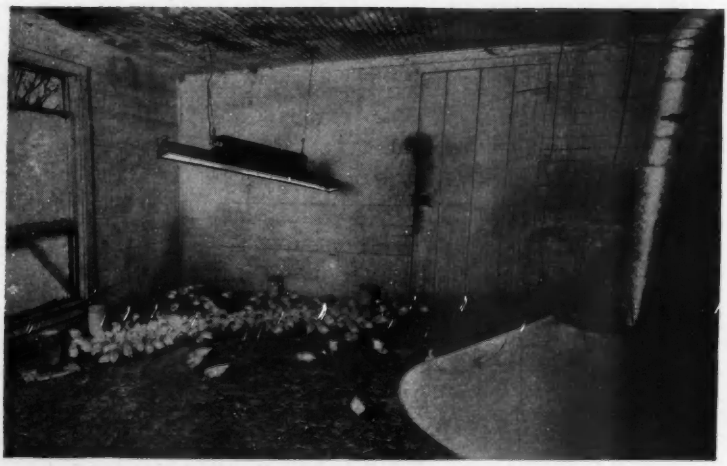
IN the last twenty years a new class of dietary factors has been discovered called vitamins. These vitamins have been found to be most essential in maintaining the health and vitality of both animals and man. They are contained in the food we eat as are other nutrient factors.

Vitamin D Sources

One of these vitamins, known as vitamin D, differs distinctly from the others in that its benefits can be obtained by the animal from two sources—foodstuffs and direct sunlight. When animals are exposed to direct sunlight, ultra violet rays contained therein have the power to react on the tissues of the skin in such a way as to bring to the animal the same benefits it would gain from eating foodstuffs rich in vitamin D. Hence, allowing them to get out of doors when the sun shines is both an effective and economical way of providing livestock and poultry with the benefits of vitamin D.

As a result of the discovery of the value of sunlight in supplying the vitamin D requirements of animal life, lamps have been developed for producing ultra-violet rays artificially. There are now available on the market such lamps selling as low as a few dollars each which have proven by actual test to be useful sources of ultra-violet light for poultry.

Sunlight, ultra-violet ray lamps and certain fish oils have all been found effective not only in preventing the disease called rickets, but also in curing it provided the diet contained enough available calcium and phosphorus salts to meet normal body requirements. Rickets is a disease characterized by weakness of the bones and is due to a break-



Preventing rickets in young chicks by irradiating them with ultra-violet light while they work busily at the mash troughs.

down in the body's bone building processes or to a subnormal intake in suitable form of the bone building minerals. Hence, it is just as important that the mineral content of the diet be looked after as it is that the vitamin D needs be met.

The anti-rachitic value of the ultra-violet rays in sunlight has been found to vary both with the time of day and with the time of year. The intensity of the sun's ultra-violet light increases rapidly from 9 a. m. to noon and then decreases through the rest of the day. Its efficiency in preventing and curing rickets also increases from midwinter to midsummer and decreases from midsummer to midwinter.

A Substitute for Sunlight

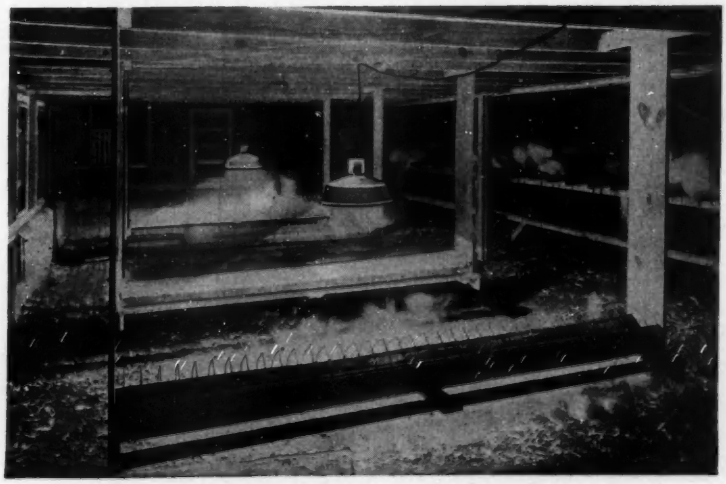
The principal use of the ultra-violet ray lamp has been as a substitute for direct sunlight. The Kansas Experiment Station found that chicks on a rachitic diet to which was added eggs from hens deprived of a sufficient amount of ultra-violet light to fully meet their needs developed rickets, whereas other chicks fed the same diet but getting eggs from hens getting ample ultra-violet light developed normally. Hatchability has also been found to be affected by the amount of ultra-violet light received by the breeding hens because of the effect on the vitamin D content of the eggs laid. It may be true that hens that have been out of doors all summer and fall will continue in apparent good health and lay well for as long as three months in winter when deprived of an adequate supply of the vitamin D factor by being kept confined. Nevertheless such confinement of breeding flocks may lower the vitamin D content of the eggs sufficiently to seriously reduce their hatchability.

The substitution of battery brooders for room brooders in the rearing of chicks; the holding of surplus chicks by hatcheries in battery brooders till they can be sold, and the increasing use of individual hen batteries for laying hens represent rather new methods of poultry management in which, perhaps, ultra-violet ray lamps can be used very advantageously to meet the vitamin D needs of the birds. Heuser and Norris at the Cornell Experiment Station, as well as many other workers, have shown that where it is not feasible to utilize natural sunlight, ultra-violet ray lamps will give just as satisfactory results.

In those cases where it would appear to be most desirable from the farm management viewpoint to employ ultra-violet ray lamps, the improvements that are being made from year to year are making available to the user new types and sizes of lamps that are meeting most effectively the particular requirements of the poultry raiser. The General Electric Co., for example, offers the S-1 and S-2 mazda sunlight lamps, the Glow lamp and the CX mazda lamps. The first three require transformers when used with alternating current, but the CX lamps can be screwed into any socket like an ordinary light bulb, no transformer being required. The S-2 sunlamp produces about one-half as much ultra-violet as the S-1 lamp, the Glow lamp one-tenth as much, and the 500 watt CX lamp one-twelfth as much. The 300 watt CX lamp produces a little over half as much ultra-violet as the 500 watt size and the 60 watt size only about one-tenth as much.

Used as a Rickets Preventative

At Cornell University rickets has been prevented in young chicks fed on a diet devoid of vitamin D by suspending 60 watt CX mazda sunlamps at intervals over the brooder house floor and burning them ten hours a day. S-2 lamps are being used for irradiating laying hens during the winter season and for chicks reared in room brooders. CX lamps have been attached to mash feeders so as to irradiate the legs of the hens while they eat; they are used as attraction lights and as substitutes for heating units in electrically heated room and battery brooders, thus accomplishing two purposes at one time; they are used in clusters to irradiate the space occupied by the feed hoppers where the chickens spend so much of their time; they can be installed in hen batteries to furnish both light and ultra-violet; in fact, sunlamps fit well into the new method of keeping poultry of all ages in batteries without the possibility of having access to direct sunlight.



Ultra-violet lamps of the CX-500 watt type suspended above the mash feeders. If burned at night these lamps not only furnish ultra-violet light but also illuminate the pen.

THE SMITH'S HIRED MAN

By ETHEL MORRISON-MARSDEN

Feed grinding was one of the tasks which Mr. Smith assigned to electricity. He speaks highly of its performance.

WE WENT to call on the Smiths one day last week. Now the Smiths are old friends of ours but they live a good seventy-five miles away and as it happened we had not been to see them in five years tho occasional letters had kept us in touch with them. We knew that four years ago they had put in electricity, and they fequently wrote that they had added this or that in the line of electrical equipment, but we were quite unprepared for what we found. For the Smith Farm was not only electrified inside the house, but thruout the barns, sheds, and chicken coops. And as Fred Smith took us around showing us his improvements this is the story he told.

"You will remember Mary writing (Mary is his wife) what an awful time I was having trying to get a hired man year before last. I got most discouraged, and I said to Mary I guess I'd have to quit farming if we couldn't find some easier way out, or some steady help.

"Well Mary said, and I'm giving her the credit for the idea, now listen Fred. Here I am using electricity in the house to do most of my work. Why it washes for me, it does my ironing, it cleans my rugs, I've got a range to cook with, and I've got chicken money saved up to buy an electric refrigerator this spring. I even sew with it, and I should think you could make a third man out of it, too. Why with the exception of lights in the barn, and pumping your water and running your separator it doesn't do a thing for you. I know it can do lots for chickens because my sister uses it to run both an incubator and a brooder and I am sure we can find things to do for us.

"Well the upshot of the whole thing," says Fred, "was that we began finding out what the possibilities of using electricity as a hired man were. And I'm telling you I was surprised but I went to work to make use of them. First thing I installed was a milking machine. And I found that I could install an electric milk cooling unit in that it would not be so expensive. The result was that I was able to get a better price for my milk than before, for now my milk was kept in the very best condition possible and that always demands the best price from the city milk dealer. Then someone told me I could, if I so desired,

The milking machine and milk cooling equipment received first consideration as duties of the new hired man—electricity.

put an electric hot water heater in my dairy, and heat enough water here at one time (I turn it on when I start to milk and it is hot enough when I finish to clean all my milking utensils) and I sure was glad to learn about that, for it cut down my work considerably as Mary and I used to work together on the pails, the cans and the separator and we used to have to heat all the water in the house, and I had to carry it out for her. It seemed to me that it cut the job down to half and there was no doubt but what everything was properly cleaned and scalded after I got it.

Needs No Attention

"One thing that used to take a lot of my time was hauling my grain to the mill to be ground, and even after I got the truck it would take time for I'd often have to wait so long for my turn, so I put in a hammer mill. You know that's the best thing. Why I have rigged it up with a chute to feed it, and it has an elevator to carry the feed away after it is ground, so that now I can get it ready, start it going and go off and leave it to run itself, while I do other chores. You'd hardly believe it would you? I tell you I'm pretty proud of that.

"Why you know there's just heaps of electrical helps on a farm. I use my soldering iron every day it seems, and one of my neighbors has an electric drill that I often borrow. I'm planning on buying an ensilage cutter this summer, and do you know I even saw an electric hay hoist at the University experiment farm this last year. And they told me there that the use of electric lights for doing chores could cut down the time of doing them 35 per cent. They even told me that in New York by taking an average of 215 farms they had found that 40 days per year could be saved by using electricity properly on the farm.

"We've got our chicken coop rigged out with an electric burglar alarm and we also have it wired so that the alarm clock gets the hens up scratching at four o'clock in the winter mornings, and last winter we got just heaps of winter eggs and they were just three times the price that summer eggs brought, so we figured that was a good investment. We are using an electric brooder this spring too, and that saves me a pile of work, and Mary too. For it keeps an even heat and there's no monkeying around filling oil tanks, or shoveling coal either.

"Oh, I'm for electricity! And you know I feel that with all I've got, electricity is in its youngest days. It's got a long way to go yet, and there are some wonderful possibilities ahead of it. I'm hoping the day will come before too long when we can use it in the field to do our work there with. But we'll have to wait a bit for that. Personally, I think electricity can do more to cut the drudgery and work out of farming than anything else. And it brings us the comforts of life as well. Just look at the running water system in the house, and our bathroom. Why, electricity has made all that possible. Who wouldn't rather live on a farm than in town when they can have all that?"

MILK WAGON COOLED ELECTRICALLY

J. H. Purcell, of Bellvue Dairy, Chesterfield County, Va., has an unique refrigerated milk wagon which makes it possible for him to haul his milk to town and deliver it at a surprisingly cold temperature.

The installation consists of an oak cabinet insulated with three inches of sheet cork, and lined with galvanized metal. It is equipped with two sets of ½-inch tubing, forming expansion coils, and which are placed on each side of the cabinet.

The compressed refrigerant is delivered through an expansion valve to the coils where the refrigerant removes the heat and brings the coils down to a very low temperature.

Mr. Purcell drives this truck up to the milk room, makes an electric connection which is in the milk house, allows the compressor to operate on its regular automatic cycle of running. When the milk is ready, it is placed in bottles in the cabinet, remaining over night, and delivered the next morning to consumers direct from the refrigerated cabinet. The refrigerator does not operate in transit, for the compressor is disconnected from the electric outlet upon leaving the dairy. There is however sufficient "hold over" by the coils to insure delivery of properly chilled milk; and when the truck returns to the dairy there still remains a satisfactorily cold temperature in the cabinet.

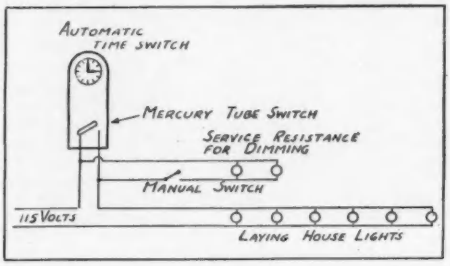
Refrigerated milk truck of the Bellvue Dairy of Virginia.

A simple hookup for dimming POULTRY HOUSE LIGHTS

By NEAL D. HERRICK

BENJAMIN KARAIN, a farmer located near Hopkinson, Mass., has worked out an inexpensive system of light switching for his poultry pens. When the power company representative told him the price of a clock that would automatically turn the lights on in the evening, switch the same lights to "dim" when the day had been lengthened enough for the evening, and again turn the same lights on in the morning for morning light, Mr. Karain felt that the investment was more than he would care to make at the time. The clock he finally purchased is an electric clock, equipped with a tube of mercury that tips to break the laying house lighting circuit. The accuracy and dependability of the electrically operated clock is well known, so that Mr. Karain knows that the lights will go on and off at the same time every day.

The unusual part about the Karain wiring hookup is that the same single circuit clock gives him automatic dimming in the evening along with the other lighting features. The wiring layout is shown in the sketch herewith.

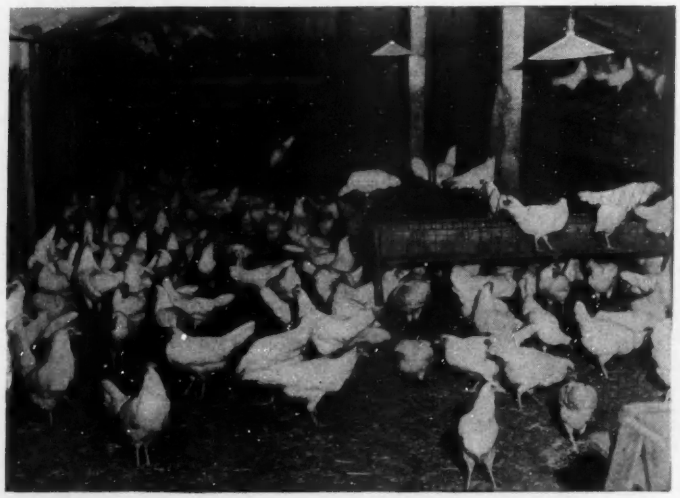


Wiring diagram showing automatic time switch, resistance unit, and poultry house lights.

Place Resistance Across Switch Contacts

A resistance, approximately equal to the resistance of the lighting load, is placed across the contacts of the mercury switch. When the switch is opened, the current must then flow through the resistance, and through the lights at the same time. When the switch is closed, most of the current flows directly through the lights, and only a small part of it passes through the resistance.

The method followed by Mr. Karain is as follows: Some time in the evening, either before or during the period when the bright night lights go on, he switches into the circuit the above mentioned resistance, by opening the mercury tube switch. Since the mercury switch, when the clock closes the contact, has a much lower resistance than that which is represented by the lights, practically all of the current for the lights passes through the mercury switch; a small part of the



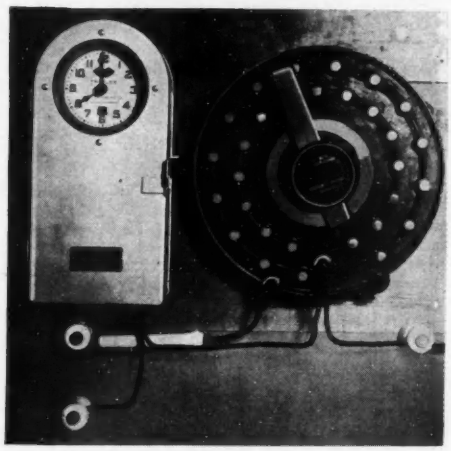
Lengthening the working day of the poultry flock means increased egg production. The additional daylight hours can best be regulated by the automatic time switch.

current flows in the line and passes through the resistance. But when the mercury switch opens, it leaves the extra resistance in series with the lights, and automatically cuts down the voltage on the lights so that less current flows through them, and they are dimmed.

Some time during the evening, after the dim lights have been on sufficiently long, the resistance is switched out of the circuit, and the bright lights are ready for morning lighting. This is accomplished by opening the manual switch located in the diaphragm. Of course, the mercury tube switch being opened, the circuit is broken and no current flows through the lights.

Closing Switch Cuts Out Resistance

When the switch is closed automatically in the morning through the operation of the clock, the current flows directly through the lights.



Automatic time switch and rheostat which serves as the resistance unit in this particular layout.

For the resistance, old appliances could be used. For instance, if the laying pen has a total of 600 watts in lights an old electric iron or toaster could be used as a resistance.

Dimmers Reduce Watts Used

During the period when the dimmers are being used, the quantity of electricity going through the house meter is greatly reduced. If 600 watts of lighting and a 600-watt resistance are placed in series, the current drawn is reduced 50 per cent, or a total of only 300 watts is going through the house meter.

A further innovation in poultry keeping is used on the Karain farm. The poultry drinking water is kept from freezing by electric heaters, as is customary on all modern farms now, but a master air thermostat does not turn the heat on until the room temperature is down to nearly freezing, and turns the heat off as soon as the room temperature goes above freezing.

HOT WATER
SPEEDS PLANT GROWTH

By LEE C. PRICKETT

HAROLD TODD, of Westchester, has a roadside nursery and flower stand, on Illinois Highway Number 6, which he operates during seasonable weather, making a special effort to satisfy the demands on such occasions as Easter Sunday, Decoration Day, etc. On warm weekends during the winter months there is also quite a market for flowers at fair prices. This coming summer Mr. Todd expects to have another stand about one mile further West on Illinois Highway Number 46.

He makes his greatest profit, of course, from what he grows for himself. Practically all of his plants are marketed in pots. At present he has several hundred potted tulips; also pinks, pansies, marigolds, ageratum, sweet alyssum, Lobelia, and other summer bedding plants in plats for later potting, located in his twelve-sash hotbed, 6 feet wide by 36 feet long (fig. 1).

Electric Pump Circulates Water

The bed is heated with electrically circulated hot water from the heating plant in his home. The hot water is carried by a 3/4-inch pipe from the top of the boiler to a 3/4-inch heater in the near end of the hotbed from which three 1/2-inch pipes (see Fig. 2) take it to a 3/4-inch header at the far end of the enclosure. The water returns from the far end of the hotbed through two 1/2-inch pipes to another 3/4-inch header, from which it is taken to the lower part of the boiler. The five 1/2-inch heating pipes are evenly spaced in the bed and covered with about one inch of soil.

After trying various arrangements in an unsuccessful attempt to get proper circulation of the hot water by gravity, Mr. Todd installed a 3/8-inch gear pump in the hot water return, the pump being operated by a 1/10-hp. motor equipped with a V-belt and pulley. (See Fig. 3).

The air temperature can be kept from falling much below 50 deg. F. and by varying the sash

(Continued on page 16)

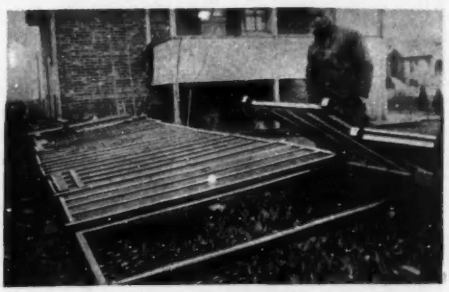


Fig. 1. Hot water pumped through this hotbed makes the flowers think that summer has arrived.

This Farmer

GRINDS HIS OWN FEED

By G. E. GUSTAFSON

IT is no small task to grind feed for between 600 to 700 head of cattle. Yet Lyle Meredith, Route 4, Maple Park, Ill., does this with his direct connected Prater hammer mill and 7½ h.p. motor. And the operation of the mill is entirely automatic, except for ear corn. The mill runs a maximum of 14 hours a day nine months of the year, with no attention other than the removal of the ground feed about every four hours.

Before installing this hammer mill in December, 1932, Mr. Meredith had his grinding done at an adjoining farm. "It cost me about 5c a hundred pounds* to have my feed ground," said Mr. Meredith, "to say nothing of the inconvenience and time spent in hauling to and from the mill. So when the power company representative told me that he could cut my grinding costs in half and save practically all my time and that the company was willing to put in a hammer mill on trial at no cost to me, I was glad to accept his offer."

Power Company Assists in Setup

With the assistance of the power company representative the mill was set up on the ground floor. There is an elevated drive to the second floor. Here a chute, or dump, was built directly above the mill so that the grain could be dumped from the wagon into the hopper of the mill on the floor below. The hammer mill is equipped with a corn crusher, blower and dust collector.

From the mill the ground feed is blown into bins on the second floor. There are two separate bins, each having a capacity of three tons, one for corn and the other for barley. In the bottom of each bin is a trap door. A wagon driven in the ground floor directly under a bin is filled by merely opening the trap door above. No shoveling is necessary.

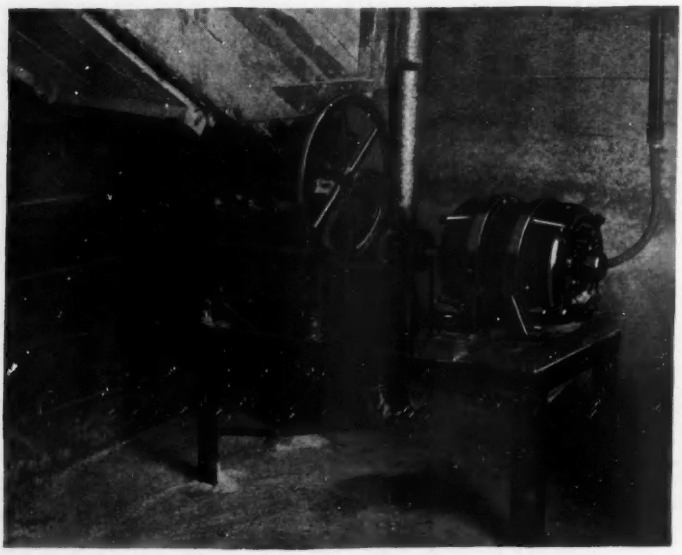
Accurate Costs Determined

In order to obtain accurate grinding costs a separate meter was connected to the motor; 3,360 pounds of shelled corn (using ⅛-inch screen) was ground in two hours' time. And the cost of the electricity used was only 50 cents, or approximately 1½c a hundred pounds; 1,440 pounds of barley (using ⅛-inch screen) was ground in one hour and ten minutes. Cost of electricity used for this was 27 cents, or approximately 1.9c a hundred pounds.

After these tests were made it didn't take Mr. Meredith very long to make up his mind to keep the mill.

Since December, 1930, when the mill was installed, he has ground more than 600 tons of feed and his total repairs, including belts, were less than $17. And if you ask Mr. Merewith, he'll tell you that it has certainly paid him to grind his own feed.

** This is about half the usual custom mill charge.*



This is the feed grinding outfit on the Meredith Farm near Maple Park, Ill. The grain is fed into the machine through the wooden hopper leading from the floor above, and after being ground is blown back into bins on the same floor.

ELECTRICAL HOUSEKEEPING

Conducted by GAIL MEREDITH

CASSEROLES Wired for Heat

A three quart casserole.

TO anyone who cooks, the new electric casseroles have something to offer.

It is because these small cookers do so many things well that they appeal to any housewife who likes to take her eyes off her dinner, now and then. You may start out using it only for real casserole cooking, cooking your meats in a thick sauce for a long time at a low temperature, but you will quickly discover you can bake meat in it too, browning it crisp and crackling on the outside. And meats are only the beginning of its possibilities.

The casserole bakes all kinds of scalloped dishes, and beans as well as apples. It is convenient for soup, and it may be used as steamer for pudding and a warming oven for rolls.

One of the new casseroles is a big generous oval that will take in a leg of lamb or a fowl, a long pork roast, or a flat slice of beef without crowding or doubling.

It has a porcelain enamel lining, heavy insulation around its walls, and an enameled metal shell outside. The heating units are in the walls so the food never burns on the bottom, nor are the meat juices dried up when the meat is done.

Cook Whole Meal at Once

A removable pan fits into the cooker. That is for a big roast or fowl. There are also three separate dishes that fit together inside the cooker and can be used to cook a whole meal at once, with the same electric current and no watching at all.

The larger dish is designed for meat, I suppose, and the smaller ones on each side of it will hold two vegetables or a vegetable and a pudding. Special baking dishes are made for this casserole so you can also use it as an oven for cake or hot breads.

Then there are two new round casseroles on the market this fall. Each holds about three quarts; that is big enough for a four pound roast. Both of them are finished in enamel, one a delicate ivory, the other, a striking green. One emphasizes the fact that its finish will neither chip nor break; the other lays claim to the distinction of being the first electric casserole to use an oven glass cover so you can watch your dinner cook if you want to.

This second casserole has twin dishes of seamless aluminum that fit inside, letting you cook two things at once. Its manufacturer makes a broiler and fryer that can be used with it, too. This is an electric hot plate that you can turn upside down in the top of the casserole to broil chops or steak. The meat is held up near the heat on a rack. A firm wooden handle on the broiler makes it easy to use.

Any of these casseroles can be used from a convenience outlet for their wattage is usually from 325 to 400 watts on High, and only 100 to 120 watts on Low. That means that cooking with them is cheap, of course. You start a dish cooking on High, but in most cases, you turn the heat to Low later, and your cooking goes on with the use of no more current than you burn in a couple of ordinary lamps.

Using a casserole is a convenient way to cook, for the dish sits anywhere you want it, within cord's length of an outlet in the wall. It is clean and comfortable cooking. The dishes are so well insulated that they can do their cooking right on the dining room table. If you like, you can leave them there to serve from at meal time. They are pretty to look at, you know.

Some of the larger cookers are making a special point of their use as an oven. Yes, besides doing all of the roasting and baking and cooking you

Save money by installing your water system NOW! And save trouble and expense later on—by choosing a Myers system that you can depend on absolutely. Priced low—but highest quality through and through! Myers has never built a "bargain" water system.

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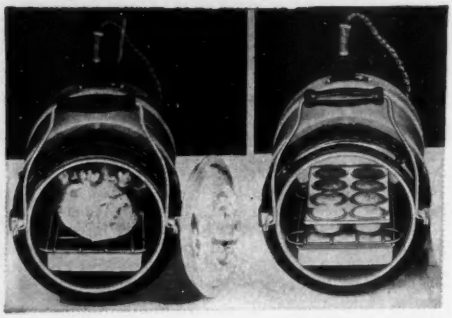
THE F. E. MYERS & BRO. CO.
367 Fourth St. Ashland, Ohio

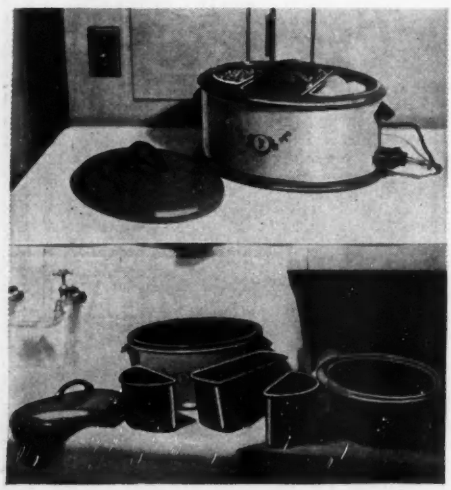


Left: If you want to roast a chicken whole, just turn the cooker on its side and put the fowl on the rack like this.
Right: Baking cake and muffins.

expect them to do with their separate dishes, they lie down on their sides and become little barrel shaped ovens. Because they are so small compared to an ordinary oven—one I know is just ten inches deep and about seven across—and because they are so very well insulated to keep every bit of the heat inside, they can do a baking job with very little current.

They carry no thermometer, no regulator to tell you how hot they are, but one manufacturer, at least, has worked out a table that tells you how hot the cooker-oven is when you have had the current on for fifteen minutes, and sixteen, and so on till the oven is as hot as you would ever want it, 550 degrees.

Since each casserole and cooker has its own special way of operation, it is well to study the manufacturer's directions carefully, and follow them faithfully when you are using a new cooker.



Upper: Here is a dinner ready to serve.
Lower: These are the dishes that fit inside the casserole.

CORN AND WHEAT

MOST of us women have always had a certain amount of skill in stretching the family dollar. It is an accomplishment we have perfected through long practice. Squeezing out a few extra pennies from the cost of the cereals we use may not make any impression on the National Debt, but it gives us a certain amount of satisfaction and some very good food.

Ways of using whole wheat right out of the bins in the granary came up at a meeting during Farm and Home Week at the Wisconsin College of Agriculture last winter.

"How can I get the wheat clean enough to use on my table, and how can I grind it up fine enough to use?" asked a pleasant little woman high up in the back of the steep chemistry auditorium.

Half a dozen voices answered her at once. One woman about half way back in the audience had such definite and clear recommendations to make that Mrs. Jones, Mrs. Nellie Kedze Jones, who was in charge of the meeting, asked her to come down to the front and retell her experience so we all might hear it clearly.

Without a trace of self consciousness this slender, grey eyed woman with a clever, intelligent face came briskly forward and turned to face the hundreds of women who filled the room.

You can grind corn or wheat in your coffee grinder.

"If the grain has been run through a fanning mill, it usually is quite clean," she began, "but I wash it in about eight waters, stirring it back and forth with my hand. Then I put the wheat in a kettle, fill the kettle up with water and boil it for about two hours, until the kernels are all open. I add more water from time to time as the kernels swell. I never salt it until I have finished cooking it. Then I take out what I want for a meal and salt it. I serve this with cream and sugar. We particularly like brown sugar on it, because of the pleasant caramel taste it gives.

"And if you want it ground," supplemented Mrs. Jones, "you can always run it through your coffee grinder or food chopper."

A friend of mine in Marshall, Missouri, grinds both wheat and corn in the cereal and coffee grinder of her electric kitchen mixer.

"I fill a glass fruit jar with the grain," she says,

(*Continued on page* 18)

ON THE AIR

Conducted by JEROME J. HENRY

Spends an Unusual Vacation

DOLLO SARGENT, popular radio organist at the San Francisco NBC studios, probably spent the most unique vacation of any radio star, for she spent most of it on a lion farm in Southern California. A friend of Dollo's operates the farm, and named the prettiest lion cub Dollo Sargent, so Dollo had to visit her feline namesake.

Absolute fearlessness is her only prescription for being a successful "lion farmer." Having that quality she learned to walk in safety among the full grown lions on the farm. If she hadn't chosen to be an organist, Dollo probably would have been a lion tamer, she says now.

• • •

If Possible, Who Would These Stars Like to Be

AROUND the studios of the Columbia Broadcasting System, one time, several of the radio stars were asked who they would like to be should the chance be given them to change places with any other person in the world.

Street Singer Arthur Tracy confessed he'd rather be himself than anyone else. Funnyboner Dave Grant didn't stop at one person—he wants to be the Boswell Sisters, also network stars.

Sandra Phillips would like to be Greta Garbo; and Dorothy Harrington's ideal personality is Amelia Earhart. If Dave Ross could start over, he'd like to be his ten year old son; Norman Brokenshire would change any time with Douglas Fairbanks, and Louis Dean wouldn't change with anybody.

Nat Brusiloff, if he could swap places with anyone, would be Babe Ruth.

• • •

Some Odd Things About Radio Stars

MOST of us have rather definite ideas about the appearance, habits, and other characteristics of radio stars. Occasionally we're right, more often the facts are quite different. Take, for instance, a few examples:

Ed Reese, the radio sleuth, has never participated in the solution of an actual crime, but he is a member of the World Association of Detectives.

Edwin C. Hill, the CBS fluent commentator on current events, has never delivered a public address.

Chase Taylor, better known as Lemuel Q. Stoopnagle, was vice president of a brokerage house before he became a radio clown.

As many Lombardo fans know, the CBS band leader hasn't played an instrument in his orchestra for 12 years.

Louis Dean, youthful CBS announcer, whose super correct pronunciation yields hardly a trace of a Southern accent, was born and raised in Alabama and educated in Virginia.

Neither Kate Smith nor Singin' Sam ever received musical training of any sort, and neither reads music while singing.

Howard Barlow, young conductor of the Columbia Symphony orchestra, was successively a lumberjack and a cowpuncher in his early life.

• • •

Bottle Prefers a Studio Audience

A STUDIO audience can be a valuable help to a radio broadcast, and particularly to a comedy program, believes Harry McNaughton, veteran comedian of stage and screen, who is Bottle the Butler with Phil Baker in the Friday evening Armour program.

Bottle relies on the reactions of the people who come to the studio to watch the broadcast. If a joke falls flat the comedian realizes his failure and is spurred to work so much the harder to win some laughs.

"Lack of an audience is one of the greatest handicaps in making comedies for the screen. It's always a job of endless repeats and retakes to time the laughs right. There can't be any retakes in a radio broadcast, so unless there is an audience in the studio the artist never can fell quite assured that he is going over," says Bottle.

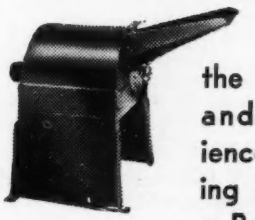
Phil Baker, who holds the spotlight in the same program, feels the same way about his audience in the studio.

• • •

Parade of Radio and Stage Stars in This Hour

ONE listener, commenting on his favorite programs, included Rudy Vallee's Thursday evening performances among his choices and said: "If

Why Not Investigate



the low cost and convenience of grinding feed with a Prater Mill right on your own farm.

A Post Card will bring you valuable information

(There are more Prater Mills on electrified farms than all other makes combined)

Prater Pulverizer Company
1829 So. 55th Avenue
Chicago, Illinois

you listen to this program continually, you'll hear most of the leaders in the radio world."

For some time, these broadcasts every Thursday at 7:00 to 8:00 p. m., eastern standard time, have presented guest artists of wide fame, several appearing in each hour. Comedians, dramatic stars, musicians, and famous singers are among those who appear from time to time.

The broadcast too opens an unusually good evening of radio entertainment. On Thursday evenings you may also hear the Maxwell House Showboat at 8:00 to 9:00 o'clock, eastern standard time, and Baron Munchausen at 9:00 o'clock.

In addition the evening offers a variety of other shows varying with different stations and locations.

M. S. Eisenhower, director of information, U. S. Department of Agriculture, is one of the busiest officials in dispensing the latest news in connection with the Administration of the Agricultural Adjustment Act. He's heard frequently on the air.

Life in Small Town Pictured by Lum and His Partner, Abner

ALL matters of a legal nature are transacted by Lum and Abner in the law and constable office, the newest structure and only office building in Pine Ridge. In that edifice Lum Edwards, J. P., attends to his onerous duties, and Constable Abner Peabody, the great detective, joins him in frequent recesses from the treadmill of labor to discuss the "goings on" of the community.

Lum and Abner, may we explain to those who don't hear them every evening from Monday to Friday each week, are the new automobile dealers of radio. They do more than sell automobiles, of course, and are becoming one of the most popular radio teams.

In their homely dialogues over NBC stations Lum and Abner discuss everything from selling automobiles to the latest and choicest bits of Pine Ridge gossip. On Friday evenings the Pine Ridge folks gather with Lum and Abner and several

(*Continued on page* 18)

Under The CHESTNUT TREE

Wouldn't Trust Himself

A Negro boxer was to fight a heavyweight champion. When he reached the ring it was noticed that he hung back.

"It's all right, Sam," said his second. "Just say to yourself, 'I'm going to beat him, and you'll win.'"

"That's no good," replied Sam. "I know what a liar I am.'

Mr. Dollar (arriving at a dinner party with family): "Please announce Mr. and Mrs. Dollar and daughter."

New Butler (announcing in loud voice): "Three Bucks."—Arizona Kitty-Kat.

"Goodness, George! This is not our baby! This is the wrong carriage."

"Shut up! This is a better carriage."—Southern Calif. Wampus.

Gimlet: "Since Ruttabegga graduated from college he has been doing a lot of writing."

Hammer: "Ah, journalist?"

Gimlet: "No answering want ads."

Lawyer Loses

Two American lawyers were en route to Europe in adjoining staterooms, No. 32 and No. 33. One became desperately ill, and, realizing he would not be able to reach shore alive, called in the Captain to request that he be buried at sea. He was given assurance that his remains would be given due consideration, and he passed peacefully out of the picture.

That evening the Captain told Mike, a deckhand, that he wanted a dead lawyer disposed of in Stateroom 32, as soon as it was dark.

The following morning the Captain discovered the remains still in evidence, so he interviewed Mike, thus:

"I thought I told you to chuck 32 overboard last night."

"Sure, and I thought you said 33."

"Did you throw 33 over?"

"I did that."

"Was he dead?"

"Faith, and he said he wasn't, but them lawyers are such liars you can't believe them."

Capital Punishment

Among the jurors summoned was a woman who wished to be excused.

"Well, madam, why don't you want to serve on this jury?" asked the judge.

"I'm opposed to capital punishment."

"But this is merely a case in which a wife is suing her husband for an accounting. It seems she gave him a thousand dollars to pay down on a handsome fur coat and he is alleged to have lost the money at poker."

The woman juror spoke up promptly. "I'll serve. Maybe I'm wrong about capital punishment."

"And you don't know anything about religion?" queried the missionary.

"Well, we got a little taste of it when the last missionary was here," replied the cannibal chieftain.

Stuffed Turkey

The newly-weds were having turkey for dinner. It was her first attempt at cooking a bird.

Hubby started to carve, but after a while he paused in his efforts and wiped his perspiring brow.

"I don't know how it's happened, my dear," he said, "but this bird has bones all over it." He again stuck the knife in the meat. "Listen," he added. "You can hear the knife grating on them."

She smiled.

"Darling, how silly of you!" she said. "Those aren't bones. Those are the shells."

"Shells?" he echoed.

"Yes," explained his wife. "Don't you remember you said you liked turkey with oyster stuffing?"

Questions and Answers

Conducted by H. J. GALLAGHER

Question: *What speed should a wood working lathe turn?*

Answer: In wood turning the speed of the lathe should be adjusted to the size of the block to be turned. A small block should revolve faster than a large one.

Diameter of work	Speeds R. P. M.	Surface speed in feet per minute
1 inch	about 3,000	about 785
2 inches	2,500	1,358
3 "	1,500	1,178
5 "	1,000	1,259
8 "	600	1,257
12 "	600	1,880
18 "	300	1,414
24 "	250	1,571

Question: *What book would you recommend for simple instructions to rewind a motor that has been burnt out?*

C. S. H., Chenalis, Wash.

Answer: Electric Motor Work by G. A. Willoughby published by the Manual Arts Press, Peoria, Illinois.

Question: *Will you kindly advise us what kind of equipment we would require to pump sediment in solution from bottom of a well 187 feet deep, 5-inch casing. Water rises to ground level and with a ¾-inch faucet open all night level of water does not drop below 25 feet from surface. This sediment is readily mixed with the water when agitated.*

What kind of an outfit is necessary to draw the water from bottom of well and discharge it at surface?

WERNER BROTHERS,
Mt. Marion, N. Y.

Answer: The method generally employed in removing sediment from the bottom of a well is by pumping with a sand pump. A sand pump is a cylinder about 7 feet in length open at the top and equipped with a valve at the bottom which permits sediment to enter the pump on the down stroke, but traps the sediment on the up stroke. Each down stroke forces additional sediment into the cylinder, after the cylinder is full it is removed and emptied and the process repeated until a sufficiently large pocket is formed at the bottom of the casing to eliminate further trouble.

It is generally more economical and satisfactory to have a job of this nature done by a well driller who has the proper equipment than to attempt to do the operation with home made equipment.

Question: *Please tell me how to make a switch to run a thermostat on a brooder so it will break its circuit current quickly. I have a switch I made that forms carbon on its points and does not open quick enough. It does not keep the temperature regular—it varies. I found that this is caused by carbon on the points. So I would like to break this circuit quickly. How would a relay work on this switch? How would you wire a relay for this? Any answer from you would be a great help.*

GORDON HURKMAN,
R. 1, West De Pere, Wis.

Answer: One of the difficulties of thermostatic controls is the carbonizing of the points of the thermostat. Bi-metallic thermostats up to a demand of 400 watts can be equipped with silver points that practically eliminate carbon trouble. The silver points are made in different sizes for different electric demands. The expanding ether wafer thermostat has given excellent service on commercial brooders. I believe it would be more desirable to purchase a good standard type of thermostat than to construct one.

A relay would not be of any particular value in a brooder circuit where the electric demand is ordinarily less than 1000 watts. A good thermostat should readily handle that amount of current without any difficulty. When the current is greater than the capacity of the thermostat, a relay switch may be installed to reduce the current at the thermostat.

It would be more satisfactory and generally less costly to purchase a relay than to build one.

Question: *Would you give me the size of pulley to use on 4½-inch burr mill described on page 9, February edition. It says 22 in. to 3 in. on ¼-h.p. motor. I have or will have 2-in. V pulley on ⅓-h.p. motor. I wish to use on grind stone and corn sheller (hand) also.*

Do you advise round belt or flat belt?

Not knowing speed such tools should run, and

(*Continued on page* 16)

ASK YOUR ELECTRIC COMPANY
to explain how other farmers use
Wood's Electric Feed Grinder

The Dual-use motor operates other Power equipment like Water Pump, Milker, Cream Separator —all at the same time it is grinding the feed.

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ESCO *The Electric* **MILK COOLER**

increases profits, cuts costs, saves labor. Cools milk quickly to below 50 degrees and keeps it cold until shipped.

The ESCO Electric Dairy Utensil Sterilizer destroys bacteria as it dries cans and pails. An automatic time and profit saver.

Send for information. Ask also about ESCO Electric Water Heaters.

ESCO CABINET CO.
174 East Market Street
WEST CHESTER, PA.

Speeds Plant Growth

(*Continued from page* 9)

opening the temperatures of the different compartments can be varied over a wide range. In cold weather the pump is kept operating 18 to

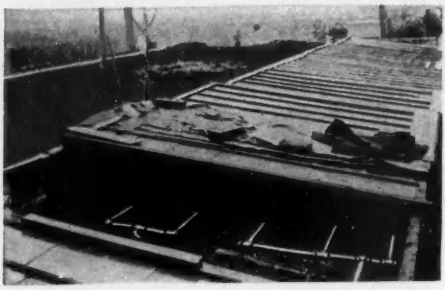

Fig. 2. These are the heating pipes through which the water flows.

20 hours per day. For a few days last winter, the outside temperature was around 5 deg. or 6 deg. F. below zero, yet no trouble was experienced in heating the beds. The coal consumption of the heating plant has not been noticeably increased beyond the requirements for other years but Mr. Todd feels that there might have been a moderate increase if the weather had been more severe.

Mr. Todd carries over his rooted rose cuttings, etc., by storing them in pots in the basement, placing them on a shelf near a South window. However, this past winter he also decided to try rooting geraniums and other plants in his basement. After consulting the Rural Service Engineer of his power company, which is the Public Service Company of Northern Illinois, he built an experimental, double-deck, cutting bench, 6 feet wide and 13 feet long, with heating cable in the bottom. Each bench was lighted by three 60-watt lamps and reflectors so as to extend the day three or four hours, a 100-watt lamp being used over geranium slips in the lower bench. Mr. Todd was well pleased with the operation of this equipment and felt that he got some benefit from the lights. He

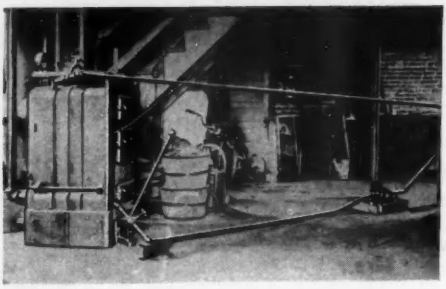

Fig. 3. Mr. Todd's basement showing the boiler that heats his house and also his hot bed.

expects to extend his operations next year, hoping to build a plant house and perhaps electrify the hotbeds in the event that he decides to grow plants requiring the closer temperature regulation made possible by electricity.

Questions and Answers

(*Continued from page* 15)

also if I increase the speed, what limit would the motor pull and not overwork?

D. A. Bullard,
Eagle Bridge, New York

Answer: The mill referred to equipped with a 22-in. pulley and driven by a 3-in. pulley operates at a speed of 238:6 R.P.M. A 2-in. pulley on the motor and a 14-in. pulley on the grinder would give about the same speed.

A V-belt on small diameter high speed pulleys is generally preferred to flat belts, to reduce belt slippage.

A grind stone should run at about 60 R.P.M. It would generally be more desirable to operate a 6-in. or 8-in. emery wheel with a motor than invest in a line shaft or jack shaft and pulleys for speed reduction. Where an emery wheel is used it is necessary to finish wood cutting tools with an oil stone to insure a good edge.

The motor belted to the fly wheel of the ordinary hand corn sheller is the method generally used.

HOT WATER

When and Where You Want It

Many everyday uses—Poultry House, Milk House, Dairy Barn, Around the House. No more lugging buckets of hot water! No more wishing for some electrical device to drop into a milk-can of water (or any handy container).

CHROMALOX

10-gallon Electric Immersion Heater

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Ask Your Power Company

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Do you know of products that should be advertised in these pages?

ELECTRICITY ON THE FARM
24 W. 40th St., New York

What's New

Reviewed by T. E. HIENTON

Electric Range

A beautiful, fast and efficient range has been added to the standard line of the manufacturer of a popular range. The working surface of this table height, two-toned porcelain enamel range is stainless. The range is equipped with four surface units which may be either open coil or hi-speed types and one of which may be used as a well cooker. The large thermostatically controlled oven has a pebbled blue porcelain enamel lining and an aluminum broiler pan. The switch buttons are bakelite and one switch controls both oven units. The oven door is of a flush type with concealed hinges.

The large storage drawer below the cooking top is cadmium plated and has a low wattage unit controlled by a toggle switch on the switch panel. This may be used as a utility drawer or for keeping food and dishes warm.

Additional equipment includes a time clock to automatically turn the oven on or off. One of the two convenience outlets may be controlled by the time clock. The range is so designed that it can be installed flush with the kitchen wall, thus eliminating waste space or dirt trap behind stove.

Overload Breaker for Small Motors

Many small motors in use on farms have been damaged, some seriously, through unintentional or accidental overload. Pump motors are sometimes subject to damage since the majority of them are operated automatically and usually start when no one is near. Occasionally belts slip or pumps stick and motors become damaged in attempting to start their loads. Fuse protection required for motors in starting may not afford protection while they are running.

Protective devices in the form of overload breakers will afford the protection necessary to prevent damage from overload. A new one has been recently announced by a middle western company. This compact unit for use with small single phase motors mounts and is wired into a standard ½-inch knockout. The relay, of melting alloy type, is provided with a reset button for closing the circuit after the current has been cut off with nothing to renew. Motors are protected against serious over-

NEW WAY TO CHURN
Thousands are changing to this simple, convenient, modern way to churn. It's the famous DAZEY principle adapted to electrical operation. Ends the drudgery. Just turn the switch. Made in 2, 4, 6 and 10 gallon sizes.
Write today for catalog and further information.
DAZEY CHURN AND MFG. CO., Dept. 27
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A Selected List of Money and Labor Saving Electrical Applications!

FOR WATER SUPPLY:

Automatic Water Systems (*see advt., page* 11)—Pump Jacks—Water Heaters (*see advts., inside front cover, page* 15)

FOR THE HOUSEHOLD:

Ranges (*see advt., inside front cover*)—Refrigerators—Clothes Washers—Vacuum Cleaners—Ironing Machines—Dishwashers—Flat Irons—Food Preparing Machines—Ice Cream Freezers—Sewing Machines—Table Appliances—Clocks—Range Replacement Units (*see advt., page* 16 *and inside front cover*)—Floor Polishers.

FOR THE DAIRY:

Milking Machines—Milk Coolers (*see advt., page* 15)—Cream Separators—Churns (*see advt., page* 17)—Bottle Washers—Dairy Sterilizers (*see advt., page* 15)—Clipping and Grooming Machines.

FOR POULTRY:

Incubators—Brooders—Time Switches—Drinking Fountain Warmers—Ultraviolet Light.

FOR REPAIR AND MAINTENANCE:

Soldering Irons—Tool Grinders—Drills—Paint Sprayers—Woodworking Machinery—Motors.

MISCELLANEOUS:

Feed Grinders (*see advt., page* 15)—Ensilage Cutters—Corn Shellers—Hay Hoists (*see advt., page* 13)—Feed Mixers—Stationary Spray Plants (*see advt., page* 11)—Burglar Alarms—Ventilators—Soil Heating Equipment—Radio Sets.

How many of these have you; which of the others do you need most?

Right now is the time to get complete information. Many of your questions can be answered most satisfactory by our advertisers. Read the advertisements carefully for these manufacturers are best equipped to help you and will answer your questions without obligation.

Any other information that you need will be supplied if you will fill out and mail this handy coupon.

— — — — — TEAR OFF HERE — — — — — —

Electricity on the Farm, 24 W. 40th St., New York

Without cost to me, please have manufacturers send complete information on the following Electrically Operated Equipment which I am thinking of buying.

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....

My name is .....

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— — — — — — — — — — — — — —

loads but the heater unit will not trip the breaker on regular starting or because of monentary overloads.

Starting Switch and Overload Protection for Fractional Horsepower Motors

Protection against stalled rotor current and injurious overload conditions is provided by a new hand-operated starting switch developed by a widely known manufacturer of electric motors and electric equipment. The importance of such protection for farm motors, particularly those operated automatically, cannot be over-emphasized.

Features of this switch are a positive snap action preventing slow opening or closing of the contact tips with freedom from tripping due to vibration. The trip-free feature prevents closing of the switch until the motor has cooled down to a safe operating temperature. Steel parts are cadmium plated to resist corrosion, while the large contact tips are pure silver. All molded parts are made of "textolite."

On the Air

(*Continued from page* 14)

guest performers for a Friday Night Sociable at the schoolhouse at 9:30 p. m., eastern standard time.

In real life Lum and Abner are "Chet" Lauck and "Tuffy" Goff. Their public appearances began with benefit performances for flood victims in Arkansas, their home state, in the winter of 1930-31. Since that time they have broadcast hundreds of radio programs.

• • •

Studio Chatter

TED BERGMAN, often heard in thug roles in CBS dramatic programs, uses a long cigarette holder and carries a silver-headed cane.

With better times looming, Jim Jordan, of the team, of Jim and Marion Jordan, hopes that chickens will again be fed the material that now goes into salads.

Tommy McLaughlin got a letter from the first girl he ever went with as the result of his first performance on a CBS program. He said: "She said she was glad I was given the air again."

Only a map maker can locate some of the towns where fan letters written to Lanny Ross, NBC tenor, originate. In one week's mail he received letters from Ty Ty, Georgia; Zinc, Ark.; Prosperity, S. C.; Paw Paw, Minn.; Zwingle, Iowa, and Zolfo, Fla.

Corn and Wheat

(*Continued from page* 12)

"and turn it over the top of the grinder so I will not have to keep adding grain. Since I put a pan under the grinder to catch the ground grain as it comes through, I need pay no attention to it, but can go on about my work while the grinding is going on.

"I crack some of the wheat kernels very coarse, perhaps in thirds, and cook the grain for three or four hours. The rest I grind as fine as the commercial cereals on the market. I like to use this for bread, particularly nut bread."

Mrs. Luella Mortenson of the Home Economics Department in the Extension Division of the Wisconsin College of Agriculture gives this recipe

Fresh Bread.

for cracked wheat bread that makes a particularly nutty, toothsome loaf.

Cracked Wheat Bread

1 quart milk	3 tablespoons butter
2 tablespoons salt	6-7 cups sifted white flour
4 tablespoons sugar	
2 cakes yeast	5 cups cracked wheat

Method:

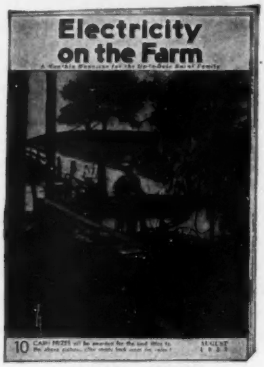
1 Scald milk and cool to luke warm, add salt.
2 Mix sugar and yeast in mixing bowl, let stand until a liquid is formed.
3 Add scalded milk and one-half the white flour, beating thoroughly. Add cracked wheat.
4 Add butter, gradually adding enough flour to make a soft ball. Turn out on floured board, knead until it becomes smooth and elastic and does not stick to the board.
5 Place in slightly greased bowl, cover and allow to rise until double its bulk in a place somewhat warmer than room temperature.
6 Form into loaves. Let double in bulk. Bake at 375 degrees for forty minutes.

We grind our own corn meal. I take perhaps a dozen ears at a time, shell it, and run it through the coffee grinder on my mixer. Then I sift the meal through a fairly coarse colander. This takes out the coarser cracked corn as well as any bits of hull that do not grind up. This fresh, fragrant meal makes delicious corn bread and rich flavored mush that is a favorite at our house.

CLASSIFIED ADVERTISING

The PARAGON POULTRY TIME SWITCH is scientifically designed and approved by state universities. It provides automatic control both morning and night and DIMS THE LIGHT AT NIGHT to allow the hens to return to roost. Low price and UNCONDITIONALLY GUARANTEED. Write for full information today. PARAGON ELECTRIC COMPANY. Van Buren and Dearborn Sts., Chicago, Ill.

COVER TITLE CONTEST



AUGUST COVER

WINNERS FOR AUGUST

FIRST PRIZE—$20

"Filling silo—the work of three
Electrically done—just by me."

MRS. FANNIE SHIVERS, Box 2, Forest, La.

Nine $2.00 Cash Prizes

"Silo filling electrically done,
Soon stores away many a ton."
LYDIA V. W. YEOMANS, Millbrook, N. Y.

"No extra men to pay,
Silo filled the electrical way."
MRS. CHARLES W. BROWN, R. 1, Feeding Hills, Mass.

"Filling silos the electrical way,
Saves time and labor any day."
HOWARD S. PERRILL, R. 4, Washington Court House, Ohio

"Dreads of silo filling flee,
When it's done electrically."
MARK G. MYERS, R. 1, New Middletown, Ohio

"Converting roughage, into valuable feed,
Economically done, with electrical speed."
OSCAR W. KNACKSTEDT, R. 1, Worden, Ill.

"Ensilage cutting time goes fast,
When electricity takes the place of gas."
MRS. IDA A. MILLER, New London, Pa.

"Portable power sure and quick,
Silo filling a one man trick."
A. M. SMITH, Box 137, Grant, Mich.

"Fill the silo the electric way
And watch the fodder sail away."
ARTHUR H. BURGAN, R. 2, Hagerstown, Md.

"No labor cost—easy way
Storing silage the electrical way."
MRS. J. W. ROBERTSON, R. 4, Mt. Sterling, Ky.

RULES FOR OCTOBER CONTEST

Titles should not be longer than 10 words—the shorter the better —and they need not be rhymes.

Ten cash prizes will be awarded for the 10 best titles for the picture on the front cover.

The first prize will be $20 cash and nine second prizes of $2 in cash will be awarded.

In case of a tie, each winning contestant will receive the full cash prize to which he or she is entitled.

All members of the farm family to whom this magazine was sent may submit titles, but each contestant may submit only one title.

Question "A" must be answered correctly.

Send your title on the coupon below or make out a similar form on a plain sheet of paper or government post card.

Entries must be sent to the Title Editor, ELECTRICITY ON THE FARM, 6 North Michigan Avenue, Chicago, Illinois, before November 1st.

Winning names and titles will be announced in the December issue.

My title for the October Front Cover picture of ELECTRICITY ON THE FARM is .....

.....

.....

(a) What features of electrified farming would you like our editors to cover more thoroughly in future issues? .....

.....

.....

My name is ..... R.F.D. .....

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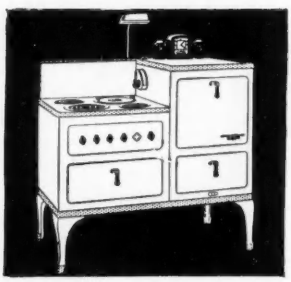

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